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| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | | | | | | | | | |
|--|---------|---------|---------|---------|---------|--|---------|---------|--|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/BA 3 | | | | | | R-1 ITEM NOMENCLATURE Software Engineering Institute PE 0603781D8Z | | | |
| COST(In Millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | |
| Total Program Element (PE) Cost | 21.876 | 22.189 | 22.652 | 22.627 | 23.330 | 23.325 | 23.535 | 24.024 | |
| Project 781/SEI | 19.470 | 19.748 | 20.107 | 20.049 | 20.706 | 20.667 | 20.852 | 21.286 | |
| Project 782/ Software Intensive Systems | 2,406 | 2.441 | 2.545 | 2.578 | 2.624 | 2.658 | 2.683 | 2.738 | |

(U) A. Mission Description and Budget Item Justification

(U) BRIEF DESCRIPTION OF ELEMENT

- (U) Software is key to meeting DoD's increasing demand for high quality, affordable, and timely national defense systems. There is a critical need to rapidly transition state-of-the-art technology and best practices to improve the acquisition, engineering, fielding, and evolution of software-intensive DoD systems. This project funds the technology transition activities of the Software Engineering Institute (SEI) at Carnegie Mellon University. The SEI is an R&D Laboratory Federally Funded Research and Development Center (FFRDC) sponsored by the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics. It was established in 1984 as an integral part of the DoD's software initiative to identify, evaluate, and transition high leverage software engineering technologies and practices. The SEI fosters disciplined software engineering practices for use by DoD acquisition and life cycle support programs and by the industrial base where the bulk of defense software is produced. The Institute works across government, industry, and academia to: (1) improve current software engineering activities from both management and engineering perspectives; (2) facilitate rapid, value-added transition of software engineering technology into practice; and (3) evaluate and calibrate emerging software engineering technologies to determine their potential for improving the evolution of software-intensive DoD systems.
- (U) The SEI enables the exploitation of emerging software technology by bringing engineering discipline to software acquisition, development, and evolution. The SEI focuses on software technology areas judged to be of the highest payoff in meeting defense needs. FY 2002 focus areas are: Technical Engineering Practices (including Survivable Systems practices, Architecture-centered Software Engineering, and Commercial Off-The-Shelf (COTS)-Based Software Engineering); Enhanced Software Management Capabilities (including personal and team software development processes and Capability Maturity Model Integration (CMMI)); and accelerating Adoption of High Payoff Software Technologies.
- (U) This funding line also includes support of the Software Intensive Systems Office (SISO), a DoD office under the Office of the Secretary of Defense (Acquisition, Technology, and Logistics) Acquisition Resource and Analysis. This DoD function is not affiliated with the Software Engineering Institute.

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| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | DATE FEBRUARY 2003 | | |
|---|--------------------------------|--|--|
| APPROPRIATION/BUDGET ACTIVITY | R-1 ITEM NOMENCLATURE | | |
| RDT&E, Defense Wide/BA 3 | Software Engineering Institute | | |
| | PE 0603781D8Z | | |

(U) Current initiatives include: Stress Software Process and Past Performance; Establish Independent Expert Program Reviews (IEPRs); Improve Software Education and Training; Document and Promulgate Best Practices; and Strengthen the Technology Base.

| B. Program Change Summary: | FY 2002 | FY 2003 | FY 2004 | FY 2005 | |
|-----------------------------------|----------------|----------------|----------------|----------------|--|
| Previous President's Budget | 21.876 | 22.983 | 23.020 | 23.088 | |
| Current FY2004 President's Budegt | 21.876 | 22.189 | 22.652 | 22.627 | |
| Total Adjustments | | -7.94 | 368 | 461 | |
| Congressional program reductions | | | | | |
| Congressional rescissions | | | | | |
| Congressional increases | | | | | |
| Reprogrammings | | | | | |
| SBIR/STTR Transfer | | | | | |
| Other | | | 368 | 461 | |